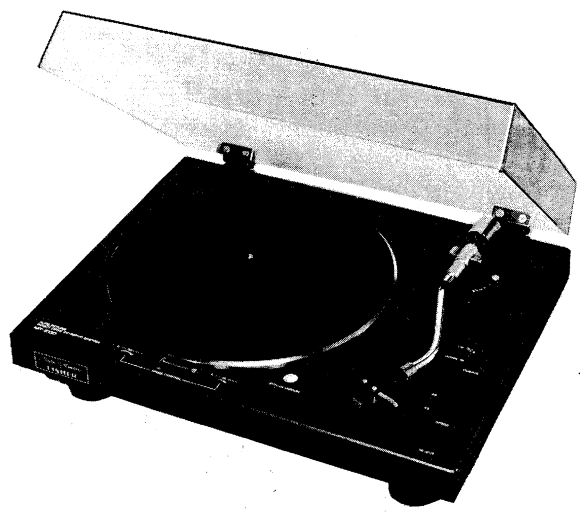
SERVICE MANUAL

FISHER

MT-6130

(EUROPE)

STEREO TURNTABLE



THE FIRST NAME IN HIGH FIDELITY

SPECIFICATIONS

Type:	Direct Drive Auto Return System
Drive System:	Direct Drive
Motor:	DC Brushless Motor
Speed:	33-1/3 & 45 rpm.
Speed Control Range:	Variable Range ±4%
Speed Change:	Electronic Type
Wow & Flutter:	Less than 0.04% WRMS
Signal to Noise Ratio:	Better than 60dB
Turntable Platter:	12-1/8" (306mm) dia. 3 lbs. 3 ozs. (1.5 kg)
Tone Arm:	Static-Balance Type, Auto Return Arm
Tracking Error:	±1.5°
Stylus Pressure:	1.2 – 2.0 g
Tracking Force Range:	0 – 3 g
Frequency Range:	20 – 20,000Hz
Channel Separation:	Betterh than 25 dB
Power Source:	AC 110/125/220V 50Hz
Power Consumption:	12W
Dimensions:	18-3/4"(W) x 6"(H) x 14-15/16"(D) (475 x 152 x 379mm)
Weight:	17 lbs. 10 ozs.

Specifications and Design are to be change without notice.

ADJUSTMENTS

1. Adjustment of lifter height
   With the cuing lever set to "UP", adjust the clearance between the disc surface and the stylus tip to approximately 4mm by turning the special screw fastening the tonearm lifter assembly (107C).

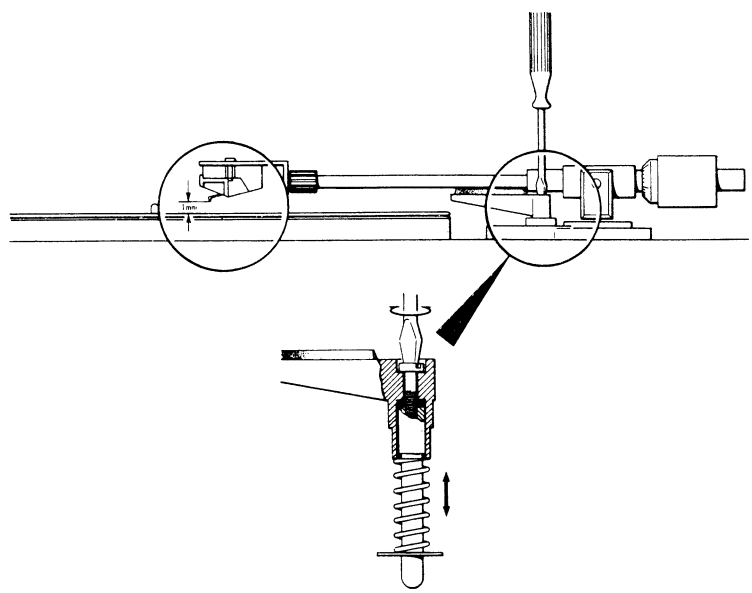


Fig. 1

2. Adjustment of Auto-Return
   Make necessary adjustment of the screw (pan head 3 x 8mm) on the tonearm return lever assembly (64) so that the Auto-Return works when the pick-up is 57 to 65mm from the center of the record.

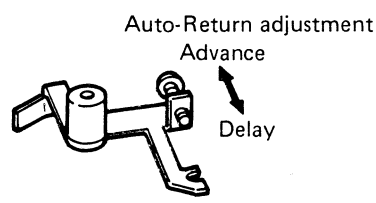


Fig. 2

ADJUSTMENTS

3. Adjustment of height of tonearm rest
   Loosen the screw (3 x 3mm) securing the tonearm rest assembly (107B) and adjust the height of the tonearm rest. Retighten the screw after each adjustment. Be sure that the tonearm does not contact the tonearm lifter with the tonearm lifter assembly (107C) in the "UP" position.

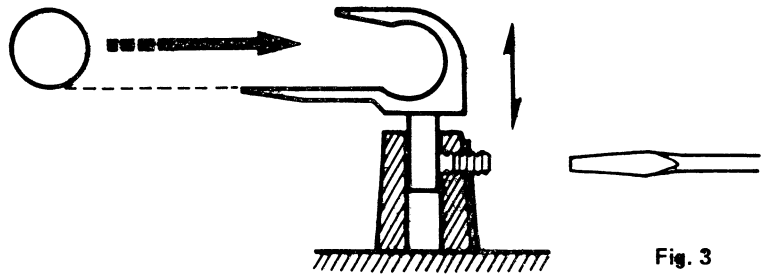


Fig. 3

4. Leveling headshell
   If the headshell is inclined either way, loosen the two screws on the tonearm and adjust its position. Retighten the screws securely after leveling.

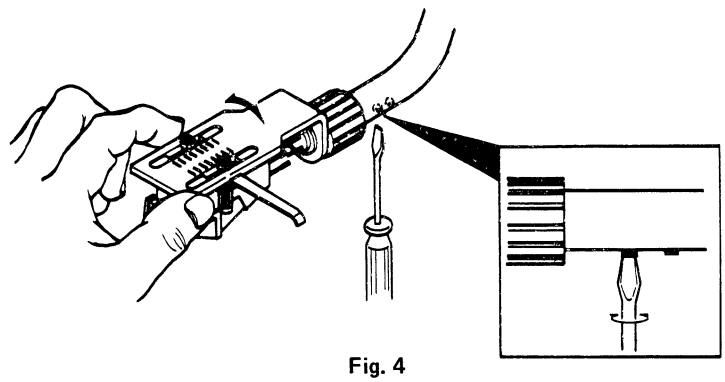


Fig. 4

Regular lubrication

Take off the turntable platter and apply two or three drops of oil to the direct-drive motor, which should be lubricated at yearly intervals. Be very careful to keep the levers (52, 53) of the gear assembly (51) from being oiled. If they are, the Auto-Return may fail to work properly.

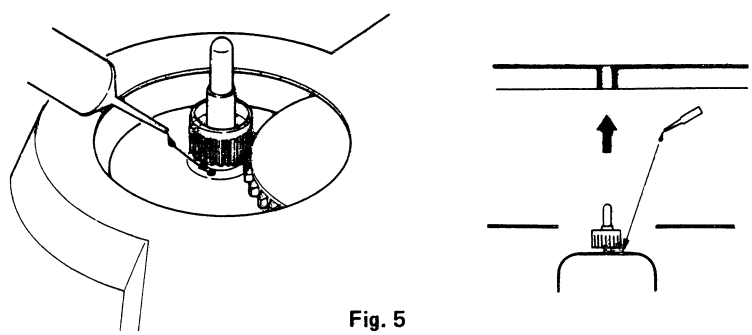


Fig. 5

Caution

Don't pull on the output cord when unplugging it, as in B, but hold the plug and pull, as in A.

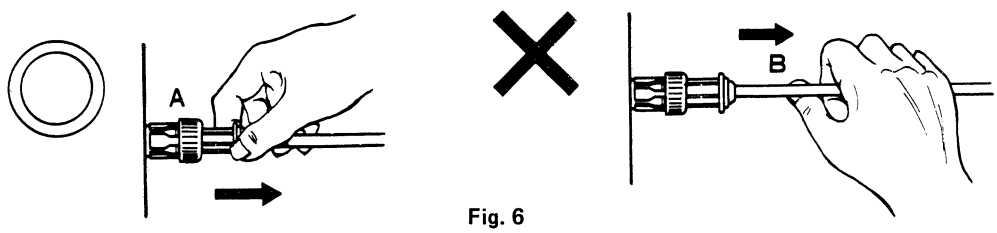
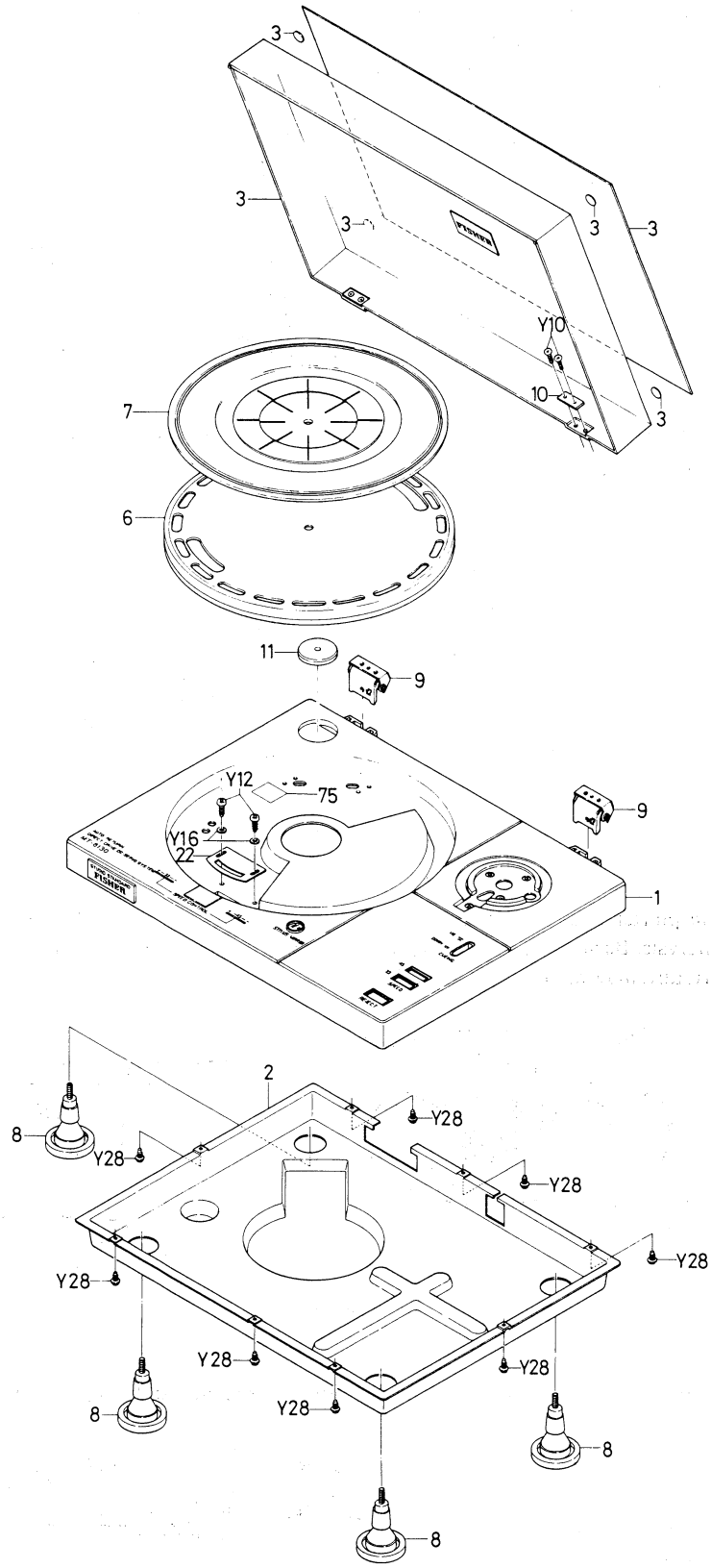


Fig. 6

EXPLODED VIEW



PARTS LIST

Ref. No.	Part No.	Description	Q'ty
PACKING			
	141-6-144T-33600	Styrol Filler, Right Side	1
	141-6-144T-33700	Styrol Filler, Left Side	1
	141-6-316T-73100	Pad, Bottom	1
	141-6-231T-10200	Inner Polyethylene Bag, Power & Output Cord	2
	141-6-231T-10100	Inner Polyethylene Bag, Cartridge & Main Weight	2
	141-6-113T-68701	Outer Carton	1
	141-6-472T-05604	Caution Label	1
	141-6-411T-90200	Instruction Booklet	1
	141-6-231T-06000	Inner Polyethylene Bag, Printed Matter	1
	141-6-415T-06700	Notice, Power Switch	1
	141-6-231T-90550	Inner Polyethylene Bag. Set	1
	141-6-231T-35400	Inner Polyethylene Bag, Turn Table & Rubber Sheet	2
	141-6-231T-50600	Inner Polyethylene Bag, Dust Cover	1
	141-2-246T-10300	Sheet, Dust Cover Protect	1
	141-6-316T-73500	Pad, Dust Cover Protect	1
	141-2-411T-95800	Instruction Manual	1
			1
CABINET & TURNTABLE MECHANISM			
1	141-0-121T-03600	Deck Panel Assembly	1
2	141-2-126T-18600	Back Lid	1
3	141-9-194T-00500	Dust Cover Assembly	1
6	141-2-118T-00300	Turn Table	1
7	141-2-246T-08700	Sheet, Turn Table	1
8	141-0-174T-00200	Stand Assembly	4
9	141-2-251T-06100	Hinge	2
10	141-2-351T-37300	Bracket, Hinge Mtg.	2
11	141-2-352T-19900	Spacer, 45 rpm. Adaptor	1
12	141-2-161T-33800	Push Button, Speed Selector	2
13	141-2-352T-21100	Spacer, Speed Selector (13) Mtg.	2
14	141-2-361T-11100	Bracket Resistor, Speed Select switch Mtg.	1
15	141-2-445T-05000	Rubber Cushion, Bracket Resistor (15) Mtg.	3
16	141-2-421T-13800	Special Screw, Bracket Resistor (15) Mtg.	3
17	141-2-161T-33900	Push Button, Reject Switch	1
18	141-2-864T-00200	Bracket, Mirror Mtg.	1
19	141-2-863T-00200	Mirror, Bracket (18) Mtg.	1
20	141-2-328T-04400	Shield Light, Bracket	1
21	141-2-445T-18900	Rubber Cushion, Neon Lamp Mtg.	1
22	141-2-135T-40400	Cover, 50/60Hz Select	1
23	141-2-367T-29600	Bracket, Power Supply Cord Mtg.	1
24	141-2-464T-20500	Fixer, Bracket (23) Mtg.	1
25	141-2-371T-06801	Bracket, PT Mtg.	1
26	141-2-461T-20700	Pipe, Insert Rubber Cushion (27)	2
27	123-2-445R-01600	Rubber Cushion, Bracket Transformer (25) Mtg.	2
28	141-2-411T-04700	Plate Nut, PT Mtg.	2
29	141-2-272T-01000	Bracket, Output Cord Mtg.	1
30	141-2-445T-16000	Rubber Cushion, Bracket (29)	1
31	141-2-163T-36100	Rotary Knob, Speed Control	2
32	141-2-361T-11900	Bracket, VR Mtg.	2
33	141-0-741T-95891	Lever Assembly	1
34	141-2-741T-95900	Lever, Arm Lifter	1
35	141-2-421T-19600	Special Screw, Lever (34) & Bracket (36) Mtg.	2
36	141-2-365T-35000	Bracket, Lever (34) Mtg.	1
37	141-2-853T-46700	Plate Spring, Bracket (36) Mtg.	1
38	141-2-753T-09000	Shaft, Lever (34) Mtg.	1
39	141-6-476T-05700	Indication Label, Fuse 400mAT	1
40	141-2-753T-12900	Shaft, Lever (44) Mtg.	1
41	141-2-747T-14300	Bracket, Lever (44) Mtg.	1
42		Rubber Cushion 2.5 x 38 x 1mm, Bracket (36) Mtg.	1
43	141-2-322T-28202	Shield Plate, Cartridge Output Terminal Cover	1
44	141-0-741T-19400	Lever Assembly, Arm Lifter	1

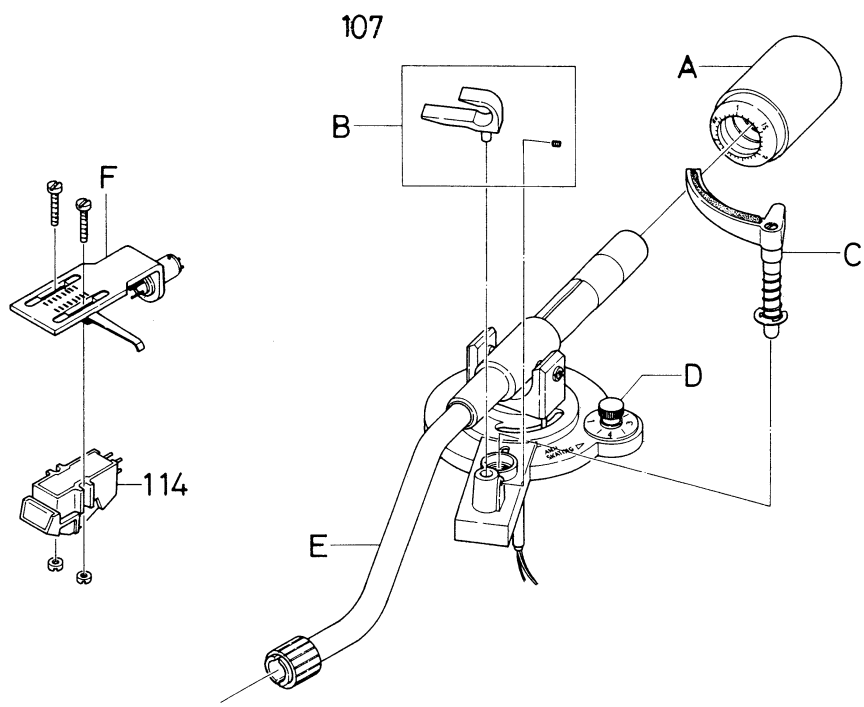
Ref. No.	Part No.	Description	Q'ty
CABINET & TURNTABLE MECHANISM			
45	141-2-472T-01001	Lug, Lead Retainer	2
46	141-2-472T-01201	Lug, Lead Retainer	5
47	141-2-464T-14900	Fixer, Output Cord Retainer	1
48	141-2-352T-22100	Spacer, Insulator	1
49	141-2-851T-31500	Coil Spring	1
50	141-0-747T-02300	Bracket Lever Assembly, Gear (51) & Slide (55) Mtg.	1
51	141-0-581T-00700	Gear Assembly	1
52	141-2-741T-97400	Lever, Gear (51) Mtg.	1
53	141-0-741T-19600	Lever Assembly, Gear (51) Mtg.	1
54	141-0-731T-15300	Slide Assembly, Main Slide	1
55	141-2-855T-09000	Coil Spring, Main Slide (54) Restore	2
56	141-0-741T-19700	Lever Assembly, Kick Lever	1
57	141-2-353T-24700	Spacer, Micro Switch insulater	1
58	141-2-747T-14200	Bracket, Reject Lever Mtg.	1
59	141-0-741T-19800	Lever Assembly, Reject Lever	1
60	141-2-683T-28900	Ring, Lever (59) Mtg.	1
61	141-2-852T-37800	Wire Spring, Kick Lever (56) Mtg.	1
62	141-2-731T-48400	Slide, Bracket (58) Mtg.	1
63	141-2-855T-09200	Coil Spring, Slide (62) Restore	1
64	141-0-741T-20100	Lever Assembly, Micro Switch Operation	1
65	141-0-741T-20000	Lever Assembly, Arm Reject Operation	1
66	141-2-853T-49200	Plate Spring, Main Slide (54) Mtg.	1
67	141-2-742T-00701	Lever, Micro Switch Mtg.	1
68	141-2-461T-27600	Pipe, Lever (67) Mtg.	1
69	141-0-683T-31200	Ring, Main Slide (54) Mtg.	1
70		Rubber Cushion 5 x 6 x 8.5mm	1
71	141-2-421T-20700	Special Screw, Auto Return Adjustable	1
72	141-2-851T-58700	Coil Spring, Lever (64 & 65) Mtg.	1
73	141-2-851T-47802	Coil Spring, Lever (67) Restore	1
74	141-2-315T-13200	Reinforcement, Lever (67) Mtg.	1
75	141-6-479T-21500	Label, Auto Play Caution on the Deck Panel	1
76	141-2-671T-05200	Cam, Lever (64) Mtg.	1
77	141-2-855T-12100	Coil Spring, Auto Play Adjust	1
78	141-2-421T-22200	Special Screw, Motor to Panel Mtg.	3
79	141-2-352T-19300	Spacer, under Terminal Board	1
80	141-2-135T-47600	Cover, Voltage Select Switch Mtg.	1
81	141-2-421T-21900	Special Screw, Micro Switch Mtg.	2
82	141-2-462T-44700	Boss, Special Screw Mtg.	1

PARTS LIST

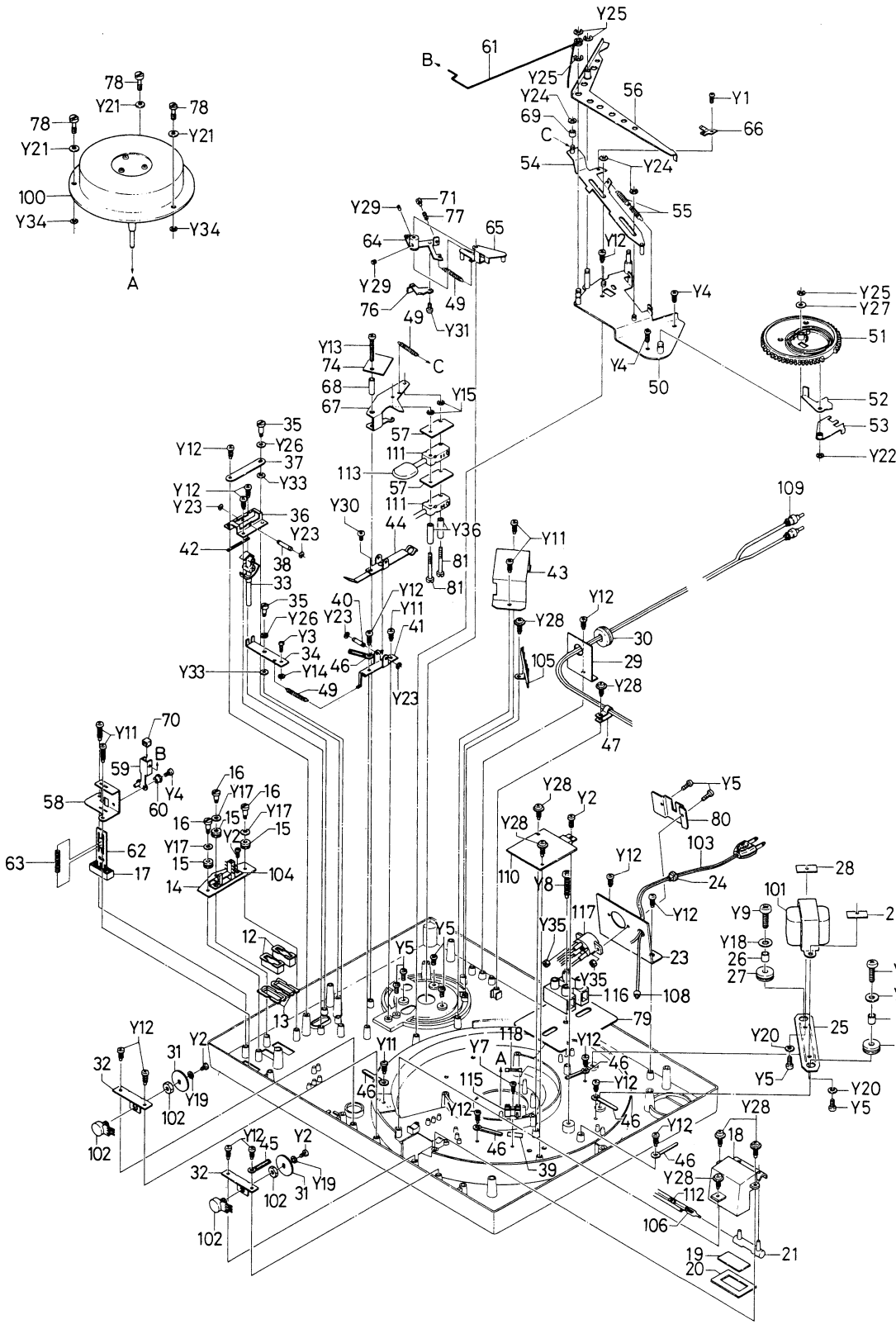
Ref. No.	Part No.	Description	Q'ty
ELECTRICAL PARTS			
100	4-527T-10000	Motor	1
101	4-251T-58300	Power Transformer	1
102	4-222T-51500	Variable Resistor 2kB	2
103	4-243T-77172	Power Supply Cord	1
104	4-231T-42300	Push Switch, Speed Selector 33/45 rpm.	1
105	123-2-472R-11201	Terminal Plate, Cartridge Output Relay	2
106	4-612T-07000	Neon Lamp	1
107	141-0-743T-01271	Arm Assembly	1
	141-2-743T-04000	Arm	1
A	141-0-687T-00100	Weight Assembly	1
B	141-0-873T-00100	Rest Assembly	1
C	141-0-872T-00100	Lifter Assembly	1
D	141-0-874T-00100	Inside Force Canceler Assembly	1
E	141-0-461T-00200	Pipe Assembly	1
F	141-2-286T-00471	Head Shell	1
108	141-2-382T-02000	Terminal Clip	1
109	4-243T-13200	Cord Assembly, Output Cord	1
110	4-230T-01091 0	Printed Circuit Board Assembly	1
	4-237T-00100	Terminal, Wire Wrap Pin	8
SVR1,2	4-222T-39474	Variable Resistor 5kB	2
Q1		Transistor 2SD325 E	1
D1		Diode DS-18	1
D2		Diode DS-17	1
D3		Diode WZ-192	1
C4		Ceramic 0.01μF +80 −20% 50WV	1
C2		Electrolytic 33μF 25WV	1
C3		Electrolytic 100μF 25WV	1
C1		Electrolytic 330μF 35WV	1
R3		Metal Oxide Film 5.6 ohm ±10% 2W	1
R2		Solid 1.2k ohm ±10% 1/2W	1
111	4-231T-61900 or 4-231T-61972	Switch, Mechanism	1
112		Solid Resistor 10k ohm ±10% 1/2W, Neon Lamp	1
113		Mylar 0.047μF ±20% 50WV	1
114	4-157T-00571	Cartridge	1
115	4-234T-01700	Fuse	1
116	4-237T-06900	Terminal	1
117	4-231T-53600	Switch, Voltage Select	1

Ref. No.	Part No.	Description	Q'ty
SCREW MOUNTING			
Y1		Pan Head Screw 2 x 4mm	1
Y2		Pan Head Screw 2.6 x 6mm	5
Y3		Pan Head Screw 2.6 x 8mm	1
Y4		Pan Head Screw 3 x 6mm	3
Y5		Pan Head Screw 3 x 8mm	6
Y9		Pan Head Screw 4 x 14mm	2
Y10		Flat Head Screw 4 x 10mm	4
Y11		Tapping Screw 3 x 6mm	11
Y12		Tapping Screw 3 x 8mm	12
Y13		Tapping Screw 3 x 30mm	1
Y14		Nut 2.6mm	1
Y15		Washer 3.2 x 8 x 1mm	2
Y16		Washer 3mm	2
Y17		Washer 4mm	3
Y18		Washer 4 x 16 x 1mm	2
Y19		Spring Washer 2.6mm	2
Y20		Spring Washer 3mm	2
Y21		Spring Washer 4mm	3
Y22		External "E" Ring 1.5mm	1
Y23		External "E" Ring 2mm	4
Y24		External "E" Ring 3mm	3
Y25		External "E" Ring 4mm	3
Y26		Graphite Nylon Wahser 4.2 x 6.5 x 0.5mm	2
Y27		Graphite Nylon Washer 6 x 10 x 0.5mm	1
Y28		Tapping Screw with Washer 3 x 8mm	14
Y29		Headless with Hexagon Hole Screw 3 x 4mm	2
Y30		Pan Head Screw 2.6 x 4mm	1
Y31		Pan Head Screw 3 x 4mm	1
Y32		External "E" Ring 1.2mm	1
Y33		Graphite Nylon Washer 4.2 x 6.5 x 0.25mm	1
Y34		Fiber Washer 4 x 8 x 0.8mm	2
Y36		UL Tube 0.7t x 19.5mm	2

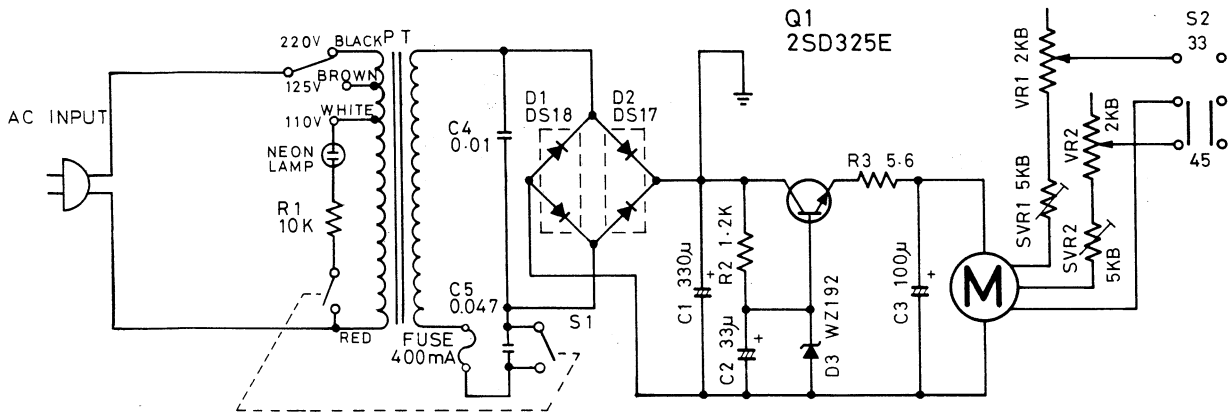
EXPLODED VIEW



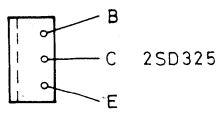
MECHANISM EXPLODED VIEW



SCHEMATIC DIAGRAM

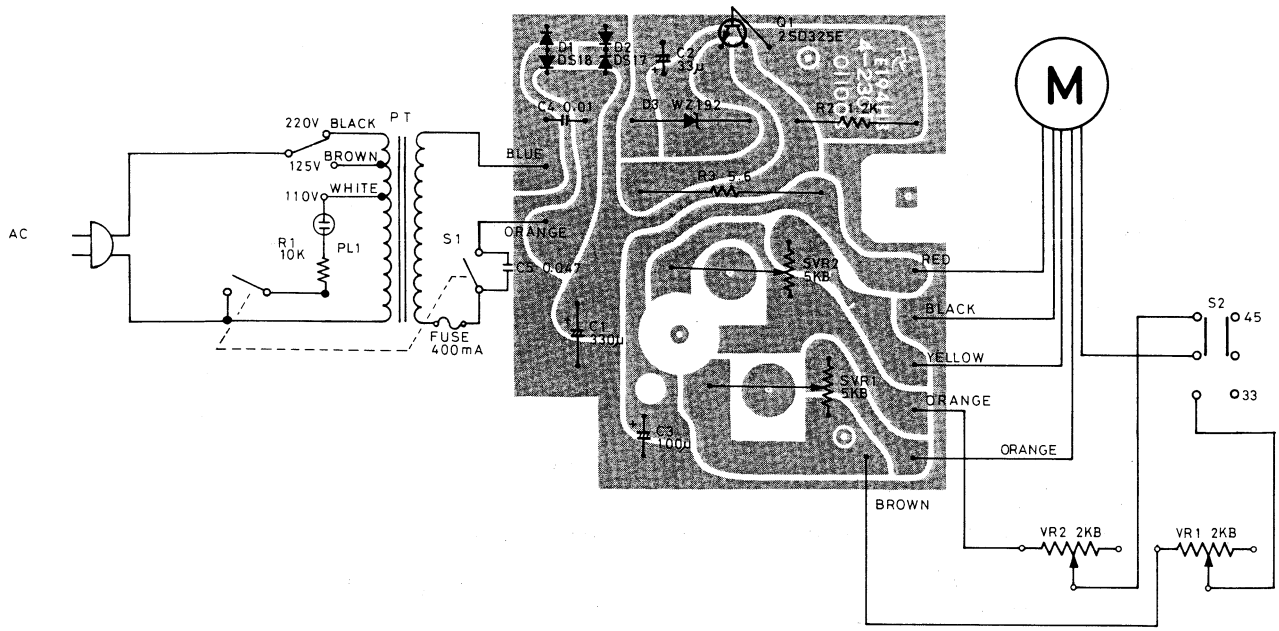


TRANSISTOR CONNECTION



S1····POWER SWITCH
S2····SPEED CHANGE SWITCH

WIRING DIAGRAM



FISHER HiFi EUROPA-VERTRIEBS GmbH
WIDENMAYERSTRAßE 25, 8000 MÜNCHEN 22, WEST GERMANY

WM-2247 Printed in Japan

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SERVICEANLEITUNG ZUM PLATTENSPIELER MT 6130

Technische Daten

Funktion	Halbautomat
Antrieb	Direktantrieb/20poliger Gleichstrom-
Geschwindigkeit	33/45 U/min Servomotor, bürstenlos
Magnetisches System	Fujionkyo ST-26 DL
Abtastkraft	0,5 - 3 p
Gleichlauf	0,04 % WRMS max.
Störabstand	60 dB
Spurfehlwinkel	$\pm$ 1,5^{o}
System	ST-26 DL
Abtastkraft	1,2 - 2,0 p
Frequenzgang	20 - 25000 Hz
Nadelnachgiebigkeit	15 x 10^{-6} cm/p horiz.,13x10^{-6}cm/p vert.
Nadel	sphärischer Diamant
Abmessungen H x B x T	15 x 48 x 38 cm

Aufgrund der unterschiedlichen Meßmethoden in USA und Europa ergeben sich Abweichungen zu den europäischen Daten.

Übersetzung der wichtigsten Begriffe

Adjustments	Einstellungen
Exploded View	Explosionszeichnung
Parts List	Stückliste
Packing	Verpackung
Cabinet	Gehäuse
Turntable Mechanism	Plattenspielermechanismus
Electrical Parts	Elektrische Teile
Screw Mounting	Schrauben
Schematic Diagram	Schaltbild
Wiring Diagram	Stromlaufplan

Service-Einstellungen

1. Einstellung der Tonarmhöhe (Bild 1)
   Schalten Sie den Tonarmlift auf "UP". Stellen Sie dann mittels der Spezialschraube den Abstand zwischen Tonabnehmernadel und Plattenoberfläche auf ca. 4 mm ein.

2. Einstellung der automatischen Rückstellung (Bild 2)
   Nehmen Sie die notwendige Einstellung mit der Flachkopfschraube (3 x 8 mm) am Tonarmrückstellhebel (64) so vor, daß die automatische Rückstellung 57 - 65 mm vom Plattenmittelpunkt wirksam wird.

3. Einstellung der Tonarmstütze (Bild 3)
   Lösen Sie die Befestigungsschraube der Tonarmauflage (107 B, 3 x 3 mm) und stellen Sie die Höhe ein. Befestigen Sie die Schraube anschließend wieder. Vergewissern Sie sich, daß der Tonarm den Tonarmlift nicht berührt, wenn der Lifthebel (107 C) in Stellung "UP" steht.

4. Tonabnehmer-Halterung (Bild 4)
   Die Tonabnehmer-Halterung kann in jeder Richtung verstellt werden. Lösen Sie die beiden Schrauben am Tonarm zum Justieren und ziehen Sie sie anschließend wieder an.

Regelmäßige Schmierung (Bild 5)

Nehmen Sie den Plattenteller heraus und geben Sie 2 - 3 Tropfen Öl auf den Direktantrieb. Dies sollte einmal jährlich geschehen. Beachten Sie, daß die Hebel des Getriebes nicht mit geölt werden. Sollte dies doch passieren, kann die automatische Abschaltung nicht mehr richtig arbeiten. In diesem Fall reinigen Sie die entsprechenden Stellen sofort mit Alkohol und einem Tuch.

Achtung: Ziehen Sie nicht am Netzkabel (Bild 6, B) sondern fassen Sie stets den Stecker an (Bild 6, A).

Die Bildnummern beziehen sich auf die Zeichnungen im englischen Service Manual.

Austausch des Tonabnehmersystems

Der Einbau erfolgt mittels der dem System beigelegten Schrauben. Vor dem Einbau Netzstecker ziehen.

1. Tonabnehmersystem mit der Rändelschraube vom Tonarm lösen.
2. Befestigungsschrauben (Bild 1) lösen und System entfernen.
3. Neues System nach Anweisungen des Herstellers befestigen, Schrauben noch nicht fest anziehen.
4. Schließen Sie die 4 farbigen Anschlußkabel vom Tonarm am System wie folgt an:

   rot = rechter Kanal Ausgang (R)
   grün= rechter Kanal Masse (R GND)
   weiß= linker Kanal Ausgang (L)
   blau= linker Kanal Masse (L GND)

   Aus den Herstellerunterlagen ersehen Sie die zugehörigen Anschlußstifte am System.
5. Stecken Sie das Tonabnehmersystem auf den Tonarm und befestigen Sie es mit der Rändelmutter (entgegen Uhrzeigersinn)
6. Führen Sie den Tonarm über die Plattenspielerachse und justieren Sie das Tonabnehmersystem so, daß die Nadelspitze 15 mm Abstand zur Achsenmitte hat (Bild 2).
7. Ziehen Sie nun die 2 Befestigungsschrauben gut an (Bild 1).

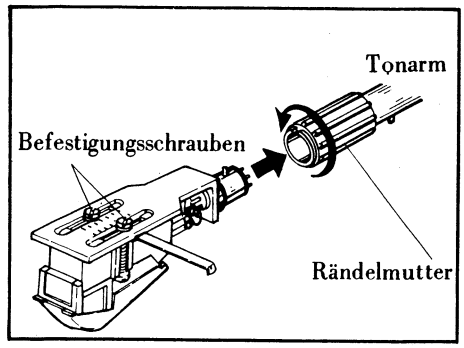

Bild 1

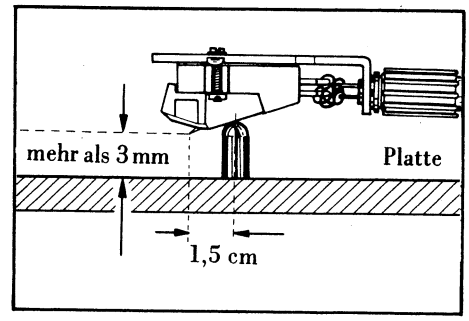

Bild 2